

**AMENDMENTS TO THE CLAIMS**

**This listing of claims will replace all prior versions and listings of claims in the application:**

**LISTING OF CLAIMS:**

1. (currently amended): An image processing method for eliminating noise from electronic data of an input image by smoothing the electronic data, the method comprising:

computing a smoothing intensity based on ~~a first intensity~~ intensities of a predetermined color component output from a pixel of interest and ~~a second intensity of predetermined color components output from~~ pixels surrounding the pixel of interest, constituting a matrix centered on the pixel of interest; and

wherein, in the computing step, the smoothing intensity is computed on the basis of a distribution expression representing the predetermined color component and the frequency of noise with respect to the predetermined color component in such a manner that when the smoothing intensity with respect to the intensity of the predetermined color component output from the pixel of interest is high, a rate at which the intensity of the predetermined color component output from the pixel of interest is to be distributed to surrounding pixels constituting the matrix is set to a large value, and when the smoothing intensity with respect to the intensity of the predetermined color component output from the pixel of interest is low, the rate at which the intensity of the predetermined color component output from the pixel of interest is to be distributed to surrounding pixels constituting the matrix is set to a small value.

2. (previously presented): The image processing method according to claim 1, wherein smoothing the electronic data by distributing the intensity of a pixel of interest is based on predetermined filter information selected on the basis of the smoothing intensity.

3. (previously presented): The image processing method according to claim 1, further comprising:

preparing filter information on the basis of the smoothing intensity; and  
smoothing the electronic data on the basis of the filter information prepared.

4. (currently amended): A recording medium storing an image processing program for causing a computer to perform processing for eliminating noise from electronic data pertaining to an image entered by way of input unit, by smoothing the electronic data, the computer being caused by the image processing program to perform:

computing a smoothing intensity based on ~~a first intensity~~ intensities of a predetermined color component output from a pixel of interest from among a plurality of pixels constituting an image input by way of the input unit and ~~a second intensity of predetermined color components output from pixels surrounding the pixel of interest constituting a matrix centered on the pixel of interest; and~~

a smoothing step for smoothing the electronic data through use of the computed smoothing intensity and outputting the smoothed electronic data;

wherein, in the computing step, smoothing intensity is computed on the basis of a distribution expression representing a relationship between the intensity of the predetermined color component and the frequency of noise with respect to the intensity of the predetermined color component in such a manner that when the smoothing intensity with respect to the intensity of the predetermined color component output from the pixel of interest is high, a rate at which the intensity of the predetermined color component output from the pixel of interest is to be distributed to surrounding pixels constituting the matrix is set to a large value, and when the smoothing intensity with respect to the intensity of the predetermined color component output from the pixel of interest is low, the rate at which the intensity of the predetermined color component output from the pixel of interest is to be distributed to surrounding pixels constituting the matrix is set to a small value.

5. (previously presented): The recording medium according to claim 4, further comprising:

a filter information selection step of selecting predetermined filter information, on the basis of the smoothing intensity,

wherein, in the smoothing step, the electronic data are smoothed and output through use of the predetermined filter information.

6. (previously presented): The recording medium according to claim 4, further comprising:

a filter information preparation step of preparing filter information on the basis of the smoothing intensity computed in the intensity computation step, and

wherein, in the smoothing step, the electronic data are smoothed and output through use of the prepared filter information.

7. (currently amended): An image processing apparatus comprising:

an image input unit into which image information is input and which can output the image information as electronic data; and

an intensity computation unit for computing a smoothing intensity based on an intensity of a predetermined color component included in the electronic data output from the image input unit,

wherein the smoothing intensity is computed on the basis of a distribution expression representing the predetermined color component and the frequency of noise with respect to the predetermined color component in such a manner that when the smoothing intensity with respect to the intensity of the predetermined color component output from the pixel of interest is high, a rate at which the intensity of the predetermined color component output from the pixel of interest is to be distributed to surrounding pixels constituting the matrix is set to a large value, and when the smoothing intensity with respect to the intensity of the predetermined color component output from the pixel of interest is low, the rate at which the intensity of the predetermined color component output from the pixel of interest is to be distributed to surrounding pixels constituting the matrix is set to a small value.

8. (previously presented): The image processing apparatus according to claim 7, further comprising:

a storage device in which predetermined filter information is stored;

a filter information selection circuit for selecting specific filter information from the predetermined filter information on the basis of the smoothing intensity computed by the intensity computation unit;

a smoothing circuit for smoothing the electronic data output from the image input unit on the basis of the specific filter information; and

a writing circuit for recording the electronic data smoothed by the smoothing unit into the storage device.

9. (previously presented): The image processing apparatus according to claim 7, further comprising:

a filter information preparation circuit for preparing filter information based on the smoothing intensity;

a smoothing unit for smoothing the electronic data on the basis of the prepared filter information;

a storage device for recording the electronic data smoothed by the smoothing circuit; and

a writing circuit for writing the electronic data smoothed by the smoothing circuit into the storage device.

10-16 (Canceled)